a transfer robot disposed in the load lock chamber adjacent the bottom and the lid.

48. (New) The system of claim 47, wherein a central portion of each chamber cavity has a diameter slightly larger than a diameter of a substrate to be received in the system.

49. (New) The system of claim 47, wherein each load lock chamber is connected to the single process chamber in a linear configuration.

50. (New) The system of claim 47, wherein the load lock chamber further comprises:
one or more perforations disposed in the bottom thereof; and
one or more lift pins slidably disposed through the one or more perforations.

51. (New) The system of claim 50, wherein the load lock chamber further comprises a cover defining an opening and the lid is adapted to substantially cover the opening.

52. (New) The system of claim 51, wherein the lid further comprises at least one stabilizing rod disposed through the lid and connected to the cover.

53. (New) The system of claim 52, wherein the lid further comprises a bellow sleeves disposed around a lower portion the stabilizing rod.

54. (New) The system of claim 46, further comprising a vacuum pump connected to the load lock chamber.

55. (New) The system of claim 48, wherein the load lock chamber further comprises:
an elongated substantially rectangular aperture; and
a hermetic sealing apparatus adapted to substantially cover the aperture.

56. (New) A semiconductor processing system for processing substrates, comprising:

a pod loader;

a mini-environment having a robot disposed therein;

one or more load lock chambers connected to the mini-environment, each load lock chamber comprising:

an enclosure having a bottom, a lid and sidewalls defining a chamber cavity having a central portion having a diameter slightly larger than a diameter of the substrates to be received in the system; and

a transfer robot disposed in the load lock chamber, wherein the transfer robot comprises:

one or more actuators;

a linkage; and

a substrate support means; and

one or more process chambers connected to the one or more load lock chambers, wherein each load lock chamber is connected to a single process chamber.

57. (New) The system of claim 56, wherein the load lock chamber further comprises a substantially rectangular aperture for providing fluid communication between the load lock chamber and the process chamber.

58. (New) The system of claim 57, wherein the load lock chamber further comprises a hermetic seal adapted to substantially cover the aperture.

59. (New) The system of claim 58, wherein the load lock chamber further comprises:

a cover defining an opening and the lid is adapted to substantially cover the opening.

60. (New) The system of claim 59, further comprising:

a transfer assembly adapted to transfer the substrates to a plurality of positions.

61. (New) The system of claim 59, wherein the load lock chamber further comprises:

one or more perforations disposed in the bottom; and

one or more lift pins slidably disposed through the perforations.

62. (New) The system of claim 61, wherein the lift pins are coupled at one end to a linear actuator.

63. (New) The apparatus of claim 56, wherein a vacuum pump is in fluid communication with the load lock chamber.

64. (New) The system of claim 61, wherein the lid further comprises:

at least one stabilizing rod disposed through the lid and connected to the cover; and

a bellow sleeves disposed around a lower portion the stabilizing rod.--

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REMARKS

The Applicant requests that the Examiner enter the amendment prior to examining the application. The Applicant has cancelled claims 1-45, without prejudice. Claims 46-64 have been added and do not constitute new matter. The application has a total of 19 pending claims with 2 independent claims, including the claims added herein.

Respectfully submitted,

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